10/826,982

Page 4

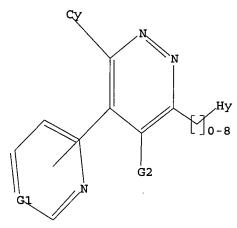
O,00-1 N,N1-2 (2)

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR



G1 C,N

G2 Ak, X, A, NO2, CN, C, O, S, N

Structure attributes must be viewed using STN Express query preparation.

=> s 11

SAMPLE SEARCH INITIATED 10:30:31 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2001 TO ITERATE

100.0% PROCESSED

2000 ITERATIONS

INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)

SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:

ONLINE **COMPLETE**

BATCH **COMPLETE**

PROJECTED ITERATIONS:

37337 TO 42703

PROJECTED ANSWERS:

O TO

L2

O SEA SSS SAM L1

=> s l1 sss full

FULL SEARCH INITIATED 10:30:48 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 37122 TO ITERATE

100.0% PROCESSED 37122 ITERATIONS

SEARCH TIME: 00.00.01

8 ANSWERS

0 ANSWERS

L3

8 SEA SSS FUL L1

Habte

09/21/2006

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 166.94 167.15

FULL ESTIMATED COST

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=> s 13

L4 1 L3

=> d ibib abs hitstr

10/826,982

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L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS ON STN ACCESSION NUMBER: 2004:927172 CAPLUS DOCUMENT NUMBER: 141:395567

DOCUMENT NUMBER: TITLE: for

Preparation of substituted pyridazines and analogs

treatment of TNP-α, IL-1β, IL-6, and/or IL-8 mediated disorders
Dominguez, Celia; Goldberg, Martin H.; Tamayo, Nuria

INVENTOR (S) :

A.
Amgen Inc., USA
PCT Int. Appl., 46 pp.
CODEN: PIXXD2
Patent

PATENT ASSIGNEE(S): SOURCE:

DOCUMENT TYPE:

PAMILY ACC. NUM. COUNT: PATENT INFORMATION:

PATENT NO.					KIND		DATE		APPLICATION NO.						DATE		
WO 2004094379				A2		20041104		WO 2004-US11953						20040415			
WO	2004094379				A3		2005	0331									
	W:	AE,	AG,	AL,	AM,	AT,	AU,	AZ,	BA,	BB,	BG,	BR,	BW,	BY,	BZ,	CA,	CH,
		CN,	co,	CR,	CU,	CZ,	DE,	DK,	DM,	DZ,	EC,	EE,	EG,	ES,	FI,	GB,	GD,
		GE,	GH,	GM,	HR,	ΗU,	ID,	IL,	IN,	IS,	JP,	KE,	KG,	KP,	KR,	KZ,	LC,
		LK,	LR,	LS,	LT,	LU,	LV,	MA,	MD,	MG,	MK,	MN,	MW,	MX,	MZ,	NA,	NI,
		NO,	NZ,	OM,	PG,	PH,	PL,	PT,	RO,	RU,	SC,	SD,	SE,	SG,	SK,	SL,	SY,
		TJ,	TM,	TN,	TR,	TT,	TZ,	UA,	UG,	US,	UZ,	VC,	VN,	YU,	ZA,	ZM,	ZW
	RW:	BW,	GH,	GM,	ΚE,	LS,	MW,	MZ,	SD,	SL,	SZ,	TZ,	UG,	ZM,	ZW,	AM,	ΑZ,
		BY,	KG,	KZ,	MD,	RU,	TJ,	TM,	AT,	BE,	BG,	CH,	CY,	CZ,	DE,	DK,	EE,
		ES,	PI,	FR,	GB,	GR,	HU,	IE,	IT,	LU,	MC,	NL,	PL,	PT,	RO,	SE,	SI,
		SK,	TR,	BF,	ВJ,	CF,	CG,	CI,	CM,	GA,	GN,	GQ,	GW,	ML,	MR,	ΝĒ,	SN,
		TD,	TG														
US 2004254178				A1	20041216			1	US 2004-826982					20040415			
ΕP	1628665			A2	20060301			EP 2004-750293					20040415				
	R:	AT,	BE,	CH,	DE,	DK,	ES,	FR,	GB,	GR,	IT.	ĻI,	LU,	NL,	SE,	MC,	PT,
		IE,	SI,	LT,	LV.	PI,	RO.	MK.	CY.	AL.	TR,	BG.	CZ.	EE.	HU.	PL.	SK.

PRIORITY APPLN. INFO. US 2003-463697P 20030416

WO 2004-US11953 W 20040415

OTHER SOURCE(S): MARPAT 141:395567

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) acid benzyl ester 786705-17-7P, 4-[4-Methyl-5-[2-(1-phenylethylamino)pyrimidin-4-yl]-6-[3-trifluoromethylphenyl)pyridazin-3-yl]piperidine-1-carboxylic acid benzyl ester 786705-19-9P, [4-[5-Methyl-6-(piperidin-4-yl]-3-(1-trifluoromethylphenyl)pyridazin-4-yl]pyrimidin-2-yl] [1-phenylethylamine 786705-21-3P, 2-Hydroxy-1-[4-[4-methyl-5-[2-(1-phenylethylamino)pyrimidin-4-yl]-6-(3-trifluoromethylphenyl)pyridazin-3-yl]piperidin-1-yl]propan-1-one 786705-23-5P, [S]-4-[4-Methyl-5-[2-(1-phenylethylamino)pyrimidin-4-yl]-6-(3-trifluoromethylphenyl)pyridazin-3-yl]piperidin-1-carboxylic acid benzyl ester 786705-25-7P, [4-(5-Methyl-6-(piperidin-4-yl)-3-(3-trifluoromethylphenyl)pyridazin-4-yl)pyrimidin-2-yl]((5)-1-phenylethyl)amine 786705-37-9P RL: PAC (Pharmacological activity); SFN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (TNF and/or IL inhibitor; prepn. of substituted pyridazines and

analogs
as TNF and IL inhibitors for treatment inflammation, pain, and other disorders)
RN 786705-13-3 CAPLUS
CN 1-Piperidinecarboxylic acid,
4-[4-methyl-5-[2-(methylthio)-4-pyrimidinyl]6-[3-(trifluoromethyl)phenyl]-3-pyridazinyl]-, phenylmethyl ester (9CI)
(CA INDEX NAME) analogs

0- CH2- Ph

786705-15-5 CAPLUS /Pelperidinecarboxylic acid, 4-[4-methyl-5-[2-(methylsulfonyl)-4-pyrimidinyl]-6-[3-(trifluoromethyl)phenyl]-3-pyridazinyl]-, phenylmethyl eater (9C1) (CA INDEX NAME) L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

$$\begin{array}{c} & & & \\ & & \\ & & & \\ & & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & &$$

Title compds. I [wherein X1, X2 = independently (un) substituted CH, N; with the proviso that at least one of X1 and X2 = N; R1 = (halo)alkyl, AB

with the proviso that at least one of X1 and X2 = N; R1 = (halo)alkyl, CN, N02, acyl, carboxy, carbamoyl, alkoxy, sulfamoyl, ureido, etc.; R2 = alkyl, Ph, PhCH2, heterocyclyl, etc.; R3, R4 * independently (un)substituted Ph, naphthyl, heterocyclyl; or pharmaceutically acceptable salts thereof] were prepared as TNF-α, IL-1B, IL-6, and/or IL-8 inhibitors. For example, a multi-step synthesis concluding with the reaction of 4-15-(2-methanesulfonylpyrimidin-4-yl)-4-methyl-6-(3-trifluoromethylphenyl)pyridiain-3-yl)piperidin-1-carboxylic acid benzyl ester and (S)-(-)-1-phenylethylamine gave II. The latter inhibited lipopolysaccharide-activated THPl cell TNF-α production with IC50 <20 μM. Thus, I and their pharmaceutical compns. are useful for the treatment of inflammation, rheumatoid arthritis, Pagetr's disease, osteoporosis, multiple myeloma, uveitis, acute or chronic myelogenous leukemia, pancreatic b cell destruction, osteoarthritis, rheumatoid spondylitis, gouty arthritis, inflammatory bowel disease, adult respiratory distrass syndrome (ARDS), psoriasis, Crohn's disease, allergic

allergic
rhinitis, ulcerative colitis, anaphylsxis, contact dermatitis, asthma,
muscle degeneration, cachexia, Reiter's syndrome, type I diabetes, type

diabetes, bone resorption diseases, graft vs. host reaction, Alzheimer's disease, stroke, myocardial infarction, ischemia reperfusion injury, atherosclerosis, brain trauma, multiple sclerosis, cerebral malaria, sepsis, septic shock, toxic shock syndrome, fever, myalgias due to HTV-1, HIV-2, HIV-3, cytomegalovirus (CMV), influenza, adenovirus, the herpes viruses, or herpes zoster infection (no data).

786705-13-3P, 4-[4-Methyl-5-(2-methylsulfanylpyrimidin-4-yl)-6-(3-trifluoromethylphenyl)pyridazin-3-yl]piperidine-1-carboxylic acid benzyl ester 786705-15-5P, 4-[5-(2-Methylsulfonylpyrimidin-4-yl)-4-methyl-6-(3-trifluoromethylphenyl)pyridazin-3-yl]piperidine-1-carboxylic

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

786705-17-7 CAPLUS Peperiodinecarboxylic acid, 4-[4-methyl-5-[2-[(1-phenylethyl)amino]-4-pyrimidinyl]-6-[3-(trifluoromethyl)phenyl]-3-pyridazinyl]-, phenylmethyl eater [9C1] (CA INDEX NAME)

786705-19-9 CAPLUS
2-Pyrimidinamine, 4-[5-methyl-6-(4-piperidinyl)-3-{3-(trifluoromethyl)phenyl]-4-pyridazinyl]-N-(1-phenylethyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

786705-21-3 CAPLUS
Piperidine, 1-(2-hydroxy-1-oxopropyl)-4-[4-methyl-5-[2-[(1-phenylethyl)amino]-4-pyrimidinyl]-6-[3-(trifluoromethyl)phenyl]-3-pyridazinyl]- (9CI) (CA INDEX NAME)

RN 786705-23-5 CAPLUS
CN 1-Piperidinecarboxylic acid,
4-(4-methyl-5-[2-[(1S)-1-phenylethyl]amino]4-pyrimidinyl]-6-[3-(trifluoromethyl)phenyl]-3-pyridazinyl]-,
phenylmethyl
ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN (Continued) 786705-27-9 CAPLUS Piperidine, 1-[(2R)-2-hydroxy-1-oxopropyl]-4-[4-methyl-5-[2-[[(1S)-1-phenylethyl]amino)-4-pyrimidinyl]-6-[3-(trifluoromethyl)phenyl]-3-pyridazinyl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

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L4 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2006 ACS on STN (Continued)

786705-25-7 CAPLUS
2-Pyrimidinamine, 4-{5-methyl-6-(4-piperidinyl)-3-[3-(trifluoromethyl)phenyl]-4-pyridazinyl}-N-[(1S)-1-phenylethyl]- (9CI) INDEX NAME)

Absolute stereochemistry.